



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
[www.uspto.gov](http://www.uspto.gov)

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/974,608	10/10/2001	Hitoshi Ebihara	SCEIWI 3.0-090	8455
530	7590	09/19/2006	EXAMINER	
LERNER, DAVID, LITTENBERG, KRUMLHOLZ & MENTLIK 600 SOUTH AVENUE WEST WESTFIELD, NJ 07090			SINGH, DALIP K	
			ART UNIT	PAPER NUMBER
			2628	

DATE MAILED: 09/19/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	09/974,608	EBIHARA ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	Dalip K. Singh	2628	

– The MAILING DATE of this communication appears on the cover sheet with the correspondence address –

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

1) Responsive to communication(s) filed on 17 January 2006.  
 2a) This action is **FINAL**.                  2b) This action is non-final.  
 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

4) Claim(s) \_\_\_\_\_ is/are pending in the application.  
 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
 5) Claim(s) \_\_\_\_\_ is/are allowed.  
 6) Claim(s) 1,2,11 and 15-17 is/are rejected.  
 7) Claim(s) 3-10,12-14 is/are objected to.  
 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

9) The specification is objected to by the Examiner.  
 10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.  
     Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
     Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
 a) All    b) Some \* c) None of:  
 1. Certified copies of the priority documents have been received.  
 2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

1) <input type="checkbox"/> Notice of References Cited (PTO-892)	4) <input type="checkbox"/> Interview Summary (PTO-413)
2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)	Paper No(s)/Mail Date. _____
3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.	5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)
	6) <input type="checkbox"/> Other: _____

## DETAILED ACTION

### ***Response to Amendment***

1. This Office Action is in response to applicant's amendment dated January 17, 2006 in response to PTO Office Action dated October 12, 2005. The amendments to claim(s) 1, 11, 15, 16, 17 have been noted and entered in the record, and applicant's remarks have been carefully considered resulting in the action as set forth herein below.

Applicant's arguments filed July 29, 2002 have been fully considered but they are not persuasive.

2. With respect to applicant's amendments to claims above, "...in response to receipt of said execution end signal from said one or more processing units, said control unit is operable to output at least a part of said processing result received from said one or more processing units to a predetermined display unit", Applicant's attention is drawn to the fact that there is no support for "a predetermined display unit" in the specification. A detailed inspection of specification provides for "...The processing table may store, in a predetermined order, redetermined speaker or speakers..."; "...predetermined order IDs of the GSMS 1 to which the drawing enable signal (DrawNext) is to be sent and processed in a predetermined manner to form frame image data..."; "...and displaying the received processing result at a predetermined timing on the display unit..."; "...drawing a predetermined image, a plurality of geometry processing means for performing geometry..." and none of these support the claim limitation "predetermined display unit".

3. With regard to amended claim limitation wherein said control unit is operable to output at least a part of said processing result...", Asano **discloses** an image processor having a plurality of unit processors which are respectively assigned specific frame regions of one picture frame to fetch input partial image signals corresponding to the specific frame regions, execute a

Art Unit: 2628

signal processing on them and send the processed signals to an output bus (See col. 7, lines 43-65) which is similar to where at least a part of said processing result is outputted.

***Claim Rejections - 35 USC § 102***

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 1, 2, 11, 15, 16 and 17 are rejected under 35 U.S.C. 102(b) as being anticipated by U.S. Patent No. 5,237,686 to Asano et al.

a. Regarding claim 1, Asano **discloses** an image processing system (Fig. 1), comprising: a plurality of processing units (...digital signal processor (DSP) modules (DMM's) 11a to 11k...col. 9, lines 45-55) each operable to initiate processing in response to reception of an execution enable signal and to produce a processing result (...the task control unit 7...determine an optimal processing block...for each of the DMM's 11a to 11k...each of the DMM's 11a to 11k decodes the command and executes the designated processing...col. 10, lines 21-27) and an execution end signal after completion of said processing (...every time the designated processing is completed, each of the DMM's 11a to 11k inform as the task control unit 7 of the completion of the task...col. 10, lines 28-31); a respective processing table for each of a plurality of applications, said processing table storing, identification information on one or more of said processing unit to which said execution enable signal is to be sent, and identification information on one or more of said processing units from which said processing result and said execution end signal are to be received (...a task table for storing information required for...to control the DMM's...col. 6, lines 1-16); and a control unit operable to control said processing units

Art Unit: 2628

such that, in response to receipt of a processing request from a identification information on one or more of said given application, said execution enable signal is sent to said one or more processing units and said processing result and said execution end signal are received from said one or more processing units, in said order determined by said corresponding processing table for said application (...a task control unit instructing each of the DMM's about...processing block assigned thereto and the contents of a processing task to be executed through a control bus...col. 5, lines 65-68; col. 6, lines 1-2...the task control unit 7 retrieves the task table 8 to determine an optimal processing block...). Asano further **discloses** an image processor having a plurality of unit processors which are respectively assigned specific frame regions of one picture frame to fetch input partial image signals corresponding to the specific frame regions, execute a signal processing on them and send the processed signals to an output bus (See col. 7, lines 43-65) which is similar to where at least a part of said processing result is outputted.

b. Regarding claim 2, Asano **discloses** wherein said processing units cooperate with one another to create frame image data with respect to divided images of a predetermined image, and to output said created frame image data as said processing result (...a plurality of DMM's each...are disposed in parallel, a picture frame is divided...into...blocks...processing tasks are determined fro each DMM...col. 11, lines 37-50).

c. Regarding claims 11, 15, 16 and 17, they are similar in scope to claim 1 above and are rejected under the same rationale.

***Allowable Subject Matter***

6. Claims 3-10 and 12-14 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base

Art Unit: 2628

claim and any intervening claims. Prior art fails to disclose or suggest a data processing system wherein a plurality of processing units include drawing processing means; geometry processing means and an image interface between drawing processing and geometry processing means; a plurality of M first arbitrator means for arbitrating operations and a second arbitrator means for arbitrating operations of said M first arbitrator means for the said processing means.

**Conclusion**

7. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to **Dalip K. Singh** whose telephone number is **(571) 272-7792**. The examiner can normally be reached on Mon-Friday (10:30AM-6:30PM).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, **Ulka Chauhan**, can be reached at **(571) 272-7782**.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished

Art Unit: 2628

applications is available through Private PAIR only. For more information about the PAIR system, see <<http://pair-direct.uspto.gov>>. Should you have questions on access to the Private PAIR system, please contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). Please note that the new Central Official FAX number for application specific communications with the USPTO is **571-273-8300** (effective July 15, 2005).

Dalip K. Singh  
Examiner , Art Unit 2628

dks  
September 6, 2006



ULKA CHAUHAN  
SUPERVISORY PATENT EXAMINER